

**Amendments to the claims:**

1. (currently amended) A drive device of a printing press, comprising:  
at least two virtual leading axles (a; b) wherein each of said at least two virtual leading axles (a; b) is configured to preset a desired angular position ( $\Phi_i'$ ) of a drive (08) of at least one unit (01; 02; 03; 04; 06; 07) driven by a separate drive motor (M)[[.]];

at least two units (01; 02; 03; 04; 06; 07) having separate drives (08) and driven by separate drive motors (M), wherein said separate drives (08) are connected to one another, and wherein each of said at least two virtual leading axles (a; b) is configured to preset a desired angular position ( $\Phi_i'$ ) of the drives (08) of the at least two units (01; 02; 03; 04; 06; 07);

at least one circuit (15; 20), wherein the at least two virtual leading axles (a; b) are connected to the at least one circuit (15; 20)[[.]] which is configured to convert chronologically changing datum for the angular position of a leading axle position ( $\Phi$ ) into a pulse train ( $I(t)$ ;  $I_0(t)$ ) in the form of output signals ( $I(t)$ ;  $I_0(t)$ )[[.]];  
and

a drive control unit (13, 17) configured to preset the leading axle position ( $\Phi$ ) and transmit said leading axle position ( $\Phi$ ) as a preset reference value to the separate drives (08) of the at least two units (01; 02; 03; 04; 06; 07);

wherein the at least one circuit is configured to generate said output signals that are parameterized with regard to a number of pulses per rotation ( $n/2\pi$ ) and an assignment to one of the at least two virtual leading axles (a; b),

wherein said pulse train includes a set of correlated pulse trains, wherein said set of correlated pulse trains are configured to indicate a direction of a movement, increase reliability, and define a zero point.

wherein the at least one circuit (15; 20) is connected as a client to a network (09) that conveys the leading axle position ( $\Phi$ ) and receives the angular position of said at least two virtual leading axles at an input of said network, and  
wherein the at least one circuit is configured to parameterize the output signal ( $I(t)$ ) with regard to the number of output pulses per rotation ( $n/2\pi$ ) of the at least two virtual leading axles axle (a; b).

2. (previously presented) The drive device as recited in claim 1, wherein the pulse train ( $I(t); I_0(t)$ ) is supplied to a drive of a subassembly (19), which is independently driven by the drive (08) of the unit (01; 02; 03; 04; 06; 07) that is coupled to the at least two virtual leading axles (a; b).

3. (original) The drive device as recited in claim 1, wherein the circuit includes a number of subcircuits that are able to generate a number of pulse trains ( $I(t)$ ) in the form of output signals ( $I(t)$ ) at a number of outputs.

4. (previously presented) The drive device as recited in claim 3,

wherein the signal generated by the circuit (15; 20) or subcircuit is adjustable by additional parameters ( $n/2\pi$ ,  $\tau$ ,  $I$ ,  $I_n(t)$ , "0") that relate to a shape of the output signal ( $I(t)$ ).

5. (previously presented) The drive device as recited in claim 3, wherein the circuit (15; 20) or subcircuit is embodied in the form of an emulator circuit.

6. (previously presented) The drive device as recited in claim 3, wherein the input of the circuit (15; 20) or subcircuit receives the current leading axle position ( $\Phi$ ) from a drive control unit (13) or a computing and data processing unit (11) of the printing press.

7. (canceled)

8. (original) The drive device as recited in claim 1, wherein a drive control unit (13) that presets the leading axle position ( $\Phi$ ) is provided, which has at least one circuit (15; 20).

9. (previously presented) The drive device as recited in claim 1, wherein the at least one circuit comprises a first and at least one second circuit (20; 15) are provided for converting the chronologically changing datum for the angular

position of a leading axle position ( $\Phi$ ) into a pulse train ( $I(t)$ ;  $I_0(t)$ ) in the form of output signals ( $I(t)$ ;  $I_0(t)$ ).

10. (previously presented) The drive device as recited in claim 9, wherein a drive control unit (13; 17) that presets the leading axle position( $\Phi$ ) has a first circuit (20), which converts the chronologically changing datum of the leading axle position ( $\Phi$ ) into a first pulse train ( $I_0(t)$ ) with a fixed, definite number of pulses per rotation ( $n/2\pi$ ) of the at least two virtual leading axles (a; b).

11. (original) The drive device as recited in claim 10, wherein an output of the first circuit (20) communicates with the input of a second circuit (15), which is able to convert the first pulse train ( $I_0(t)$ ) into a new pulse-shaped output signal ( $I(t)$ ) in conjunction with parameters ( $n/2\pi$ ,  $\tau$ ,  $I$ ,  $I_n(t)$ , "0") that influence the shape.

12. (previously presented) The drive device as recited in claim 11, wherein the second circuit (15) has a number of subcircuits, which are able to generate a number of different pulse trains ( $I(t)$ ) in the form of output signals ( $I(t)$ ) at a number of outputs.

13. (previously presented) The drive device as recited in claim 11, wherein the parameters ( $n/2\pi$ ,  $\tau$ ,  $I$ ,  $I_n(t)$ , "0") of the circuit (15) or its subcircuits are adjustable.

14. (canceled)
15. (previously presented) The drive device as recited in claim 1, wherein it is possible to parameterize the circuit (15; 20) with regard to the number of pulses per rotation ( $n/2\pi$ ) of a subassembly (19) to be controlled by means of the circuit (15; 20).
16. (previously presented) The drive device as recited in claim 4, wherein it is possible to parameterize the output signal ( $I(t)$ ) with regard to a height of its amplitude ( $I$ ).
17. (previously presented) The drive device as recited in claim 1, wherein the converted pulse train ( $I(t)$ ) is present at the output of the circuit (15; 20) in the form of a digital output signal ( $I(t)$ ).
18. (previously presented) The drive device as recited in claim 1, wherein the converted pulse train ( $I(t)$ ) is present at the output of the circuit (15; 20) in the form of an analog output signal ( $I(t)$ ).
19. (previously presented) The drive device as recited in claim 1, wherein the output signal ( $I(t)$ ) at an output has the set of correlated pulse trains ( $I_A(t); I_B(t); I_C(t)$ ).

20. (previously presented) The drive device as recited in claim 4,  
wherein the circuit (15; 20) is detachably connected to a computing unit (11) in  
order to adjust the parameters ( $n/2\pi$ ,  $\tau$ ,  $I$ ,  $I_n(t)$ , "0").
21. (canceled)
22. (previously presented) The drive device as recited in claim 10,  
wherein the drive control unit (13; 17) that presets the leading axle position ( $\Phi$ ) is  
embodied in the form of an independent master for the drives (08) that are  
coupled to the at least two virtual leading axles (a; b).
23. (previously presented) The drive device as recited in claim 10,  
wherein the drive control unit (17) that presets the leading axle position ( $\Phi$ ) is  
embodied as a drive control unit (17) of a folding unit (06).
24. (previously presented) A method for controlling a subassembly of a  
printing press, said printing press having at least two virtual leading axles (a; b),  
wherein each of said at least two virtual leading axles (a; b) is configured to  
preset a desired angular position ( $\Phi_i'$ ) of a drive (08) of at least one unit (01; 02;  
03; 04; 06; 07) driven by a separate drive motor (M),  
wherein at least one circuit (15; 20) connected to the at least two virtual  
leading axles (a; b) converts the chronologically changing datum for the angular

position of a leading axle position ( $\Phi$ ) into a pulse train ( $I(t)$ ;  $I_0(t)$ ) and supplies it in the form of output signals ( $I(t)$ ;  $I_0(t)$ ) to the subassembly (19) and an incremental resolution between the rotating leading axle (a; b) and an angular position transducer of a subassembly (19) to be controlled via the circuit (15; 20) or its drive motor is performed by parameterizing the output signals generated by the circuit with regard to a number of pulses per rotation ( $n/2\pi$ ) and an assignment to one of the at least two virtual leading axles (a; b), wherein said pulse train includes a set of correlated pulse trains, wherein said set of correlated pulse trains are configured to indicate a direction of a movement, increase reliability, and define a zero point.

25. (previously presented) A drive device of a printing press, comprising:

at least two virtual leading axles (a; b), wherein each of said at least two virtual leading axles (a; b) is configured to preset a desired angular position ( $(\Phi_i)$ ) of a drive (08) of at least one unit (01; 02; 03; 04; 06; 07) driven by a separate drive motor (M),

wherein the at least two virtual leading axles (a; b) are connected to at least one circuit (15; 20), which is configured to convert chronologically changing datum for the angular position of a leading axle position ( $\Phi$ ) into a pulse train ( $I(t)$ ;  $I_0(t)$ ) in the form of output signals ( $I(t)$ ;  $I_0(t)$ ), wherein the at least one circuit is configured to generate said output signals that are parameterized with regard to a number of pulses per rotation ( $n/2\pi$ ) and an assignment to one of the at least

two virtual leading axles (a; b), wherein said pulse train includes a set of correlated pulse trains, wherein said set of correlated pulse trains are configured to indicate a direction of a movement, increase reliability, and define a zero point, and

wherein each of said pulse trains consists of a number of pulses per rotation and represents an angular position of an axle, while said correlated pulse train as a whole represent the direction of movement of the axle.

26. (previously presented) The drive device as defined in claim 1, wherein said correlated pulse trains include a pulse train  $I_A(t)$  and its inversion, a chronologically offset pulse train  $I_B(t)$  and its inversion, and a pulse train  $I_C(t)$  identifying a zero point.